

**WHAT IS CLAIMED IS:**

1. An introducer apparatus for providing a reduced-friction pathway through an internal bodily passage of a patient, comprising:

a flexible introducer member having a distal end and a proximal end, the introducer member being adapted to be introduced into the patient through an endoscope;

a sleeve comprising a flexible material and which includes a first end, a second end, a first body portion, and a second body portion, the first body portion being attached to the introducer member, the second body portion, which includes the second end, being moveable in response to movement of a second member sized for introduction through the introducer member and through the internal bodily passage;

whereby the second body portion is eversible from a passageway of the second member such that the second member passageway is substantially unobstructed upon full deployment of the second member; and

whereby the sleeve provides a reduced-friction pathway for at least a portion of the second member during advancement thereof through the internal bodily passage.

2. The apparatus of claim 1, wherein the sleeve is an elongate tubular member having a passageway therethrough.

3. The apparatus of claim 2, wherein the sleeve comprises a thin polymeric film.

4. The apparatus of claim 3, wherein the sleeve comprises expanded polytetrafluoroethylene.

5. The apparatus of claim 3, wherein the sleeve comprises polyethylene.

6. The apparatus of claim 2, wherein the sleeve includes a plurality of apertures disposed thereabout.

7. The apparatus of claim 2, wherein the sleeve is configured to bias the second member in a predetermined direction in at least partial response to forward advancement of the second member within the sleeve.

8. The apparatus of claim 1, wherein the sleeve includes a circumferentially open portion extending at least partially along the length thereof.

9. The apparatus of claim 8, wherein the sleeve is a non-tubular in shape, such that it extends only partially around the circumference of the introducer member to which it is attached.

10. The apparatus of claim 1, wherein at least a portion of the second member is disposed within the introducer member, further wherein the second member comprises an elongate tube.

11. The apparatus of claim 1, wherein the introducer member comprises an elongate tube.

12. The apparatus of claim 11 wherein the internal passage is the patient's duodenum, and wherein the elongate tube has a first end, a second end, and a length that is sufficient to permit the first end to be located adjacent to the patient's duodenum while the second end is located outside of the patient.

13. The apparatus of claim 11, wherein the elongate tube includes at least a second passageway extending therethrough.

14. The apparatus of claim 11, wherein the introducer member includes at least one longitudinal predetermined split line that permits, with manipulation by the operator, external access to the passageway of the introducer member to permit removal of the inner member therefrom.

15. The apparatus of claim 1, wherein the introducer member comprises a plurality of longitudinal members that are configured to cooperate with the

second member such that they are slidable relative to the second member to evert the sleeve from the passageway thereof.

16. The apparatus of claim 1, wherein the sleeve further includes a tether attached about the second end thereof, the tether sized such that the operator can reload the sleeve back into the second member from the proximal end of the introducer member.

17. The apparatus of claim 1, wherein the first end of the sleeve is permanently and circumferentially attached about an exterior surface of the introducer member.

18. The apparatus of claim 1, wherein the first end of the sleeve is releasably attached about the introducer member.

19. The apparatus of claim 1, wherein the second end of the sleeve is loadable into the passageway of the second member.

20. The apparatus of claim 1, wherein the sleeve further comprises a series of pleats, the pleats adapted to unfold longitudinally as the sleeve everts from the passageway of the inner member.

21. The apparatus of claim 1, wherein the introducer member includes a second passageway therein.

22. The apparatus of claim 1, wherein the endoscope comprises a distal end, a proximal end, and a working channel, and further wherein at least a portion of the introducer member is disposed within the working channel of the endoscope.

23. An introducer apparatus for providing a reduced-friction pathway through an internal bodily passage of a patient, comprising:

a flexible introducer member having a distal end, a proximal end, and a passageway extending therethrough, the introducer member being adapted to be introduced into the patient through an endoscope;

a second member having a distal end and a proximal end, the second member being slidably disposed within the passageway of the introducer member;

a sleeve comprising a flexible material and which includes a first body portion having a first end, and a second body portion having a second end, the first end of the first body portion being attached to the introducer member, the second end and at least a portion of the second body portion being loadable into the passageway of the second member;

whereby the second body portion is eversible from the passageway of the second member in response to movement of the second member relative to the introducer member, such that the passageway is substantially unobstructed by the sleeve upon full deployment of the second member; and

whereby the sleeve provides a reduced-friction pathway for at least a portion of the second member during advancement thereof through the internal bodily passage.

24. The apparatus of claim 23, wherein the sleeve is at least 6 cm in length.

25. The apparatus of claim 23, wherein the sleeve is at least 20 cm in length and the introducer member comprises a feeding tube.

26. The apparatus of claim 23, wherein the introducer member and the second member each comprise elongate tubes.

27. The apparatus of claim 23, wherein the introducer member and second member each comprise catheters having a length of at least 150 cm.

28. The apparatus of claim 23, wherein the introducer member includes a second passageway, the second passageway being located relative to the point

of attachment such that second passageway is not obstructed by a portion of the sleeve during use of the apparatus.

29. The apparatus of claim 23, wherein the distal end of the second member includes a friction-reducing mechanism located thereabout to facilitate passage of the sleeve thereover.

30. The apparatus of claim 23, wherein the second member is configured so as to be biased in a predetermined direction upon forward advancement within the sleeve.

31. The apparatus of claim 30, wherein the distal end of the second member is asymmetrical in shape.

32. The apparatus of claim 23, wherein the second member is adapted for delivery of a stent.

33. The apparatus of claim 23, wherein the apparatus is adapted for the introduction of a third member upon deployment of the second member.

34. The apparatus of claim 33, wherein the third member is preloaded within the passageway of the second member, the proximal end of the second member being configured to receive at least a portion of the third member.

35. The apparatus of claim 23, wherein the second member includes an expandable zone extending longitudinally therealong such that the passageway of the second member can be expanded in diameter.

36. The apparatus of claim 23, wherein the introducer member comprises a plurality of longitudinal attachment strips adapted for attaching the sleeve to the introducer member, one or more of the plurality of longitudinal attachment strips being slidably disposed within channels formed in the introducer member.

37. The apparatus of claim 23, wherein the second end of the sleeve is attached to the second member.

38. The apparatus of claim 23, wherein the second member includes a fluid reservoir portion adapted for the delivery of fluids therefrom.

39. The apparatus of claim 23, wherein the endoscope comprises a distal end, a proximal end, and a working channel, and further wherein at least a portion of the introducer member is disposed within the working channel of the endoscope.

40. An introducer apparatus for providing a reduced-friction pathway into an internal bodily passage of a patient, comprising:

- a flexible introducer member having a distal end and a proximal end, the introducer member comprising an elongate tube adapted to be introduced into the patient through an endoscope;

- a sleeve comprising a flexible material and which includes a first body portion and a second body portion, the first body portion being attached to the introducer member, the second body portion being moveable in response to movement of a second member through the introducer member and into the internal bodily passage, the second member comprising an elongate tube adapted to slide through an internal passageway of the introducer member;

- whereby the second body portion is unattached to the second member and is eversible from a passageway thereof, such that the second member passageway, upon full deployment of the second member, is unobstructed by the sleeve; and

- whereby the sleeve provides a reduced-friction pathway for at least a portion of the second member during advancement of the second member into the bodily passage.

41. An arrangement for locating an elongated member within an internal bodily passage of a patient, wherein a substantial part of a flexible sleeve is movably

located within an interior portion of the elongated member, and wherein means are provided for fixing another part of the sleeve at a location external to an outside surface of the elongated member so that when the elongated member is moved in a distal direction, a distal part of the elongated member engages and completely unfurls the substantial part of the sleeve between the outside surface of the elongated member and an inside surface of the internal bodily passage.

42. An arrangement according to claim 41, wherein a sleeve fixation mechanism is provided for clamping the said another part of the sleeve relative to part of the anatomy of the patient whilst the said substantial part of the sleeve is unfurled.

43. An arrangement according to claim 42, wherein the said another part of the sleeve is affixed against movement relative to a distal end of an introducer member through which the elongated member is inserted and extended to the internal bodily passage.

44. An arrangement according to claim 43, wherein at least one of the introducer member and the flexible sleeve is made of splittable material that is adapted to be peeled back and removed so as to permit the elongated member only to remain in the internal bodily passage.

45. An arrangement according to claim 41, wherein means are provided for orienting the distal end of the elongated member during insertion into the internal bodily passage.

46. An arrangement according to claim 41, wherein the flexible sleeve is pleated when within the elongated member in order to minimize frictional effects.

47. An arrangement according to claim 43, wherein the elongated member and the introducer member each comprise elongated flexible tubes adapted to be introduced into the patient through an endoscopic device.

48. A method of reducing frictional effects when introducing an elongated member having a passageway into an internal bodily passage, the elongated member comprising a flexible sleeve with a substantial length of the sleeve disposed in an internal passageway of the elongated member and with a part of the sleeve fixed at a location outside of the elongated member, so that when the elongated member is moved in a distal direction, a distal part of the elongated member engages the sleeve and unfurls it between an outside surface of the elongated member and the internal bodily passage, the sleeve being adapted so as to not obstruct the internal passageway of the elongated member upon unfurling from within the internal passageway of the elongated member.

49. An introducer apparatus for providing a reduced-friction pathway into an internal bodily passage of a patient, comprising:

- a flexible introducer member comprising an elongate tubular member having an outer surface, a distal end, a proximal end, and a passageway extending therethrough, the introducer member being adapted to be introduced into the patient through an endoscopic device;

- a second member comprising an elongate tubular member having a distal end, the second member slidably disposed within the passageway of the introducer member;

- a tubular sleeve comprising a thin polymeric film and which includes a first body portion and a second body portion, the first body portion being attached about the outer surface of the introducer member at a location near the distal end of the introducer member, the second body portion being disposed within the passageway of the second member, the sleeve being responsive to movement of the second member as the distal end of the second member advances relative to and beyond the distal end of the introducer member; and

- whereby the second body portion is completely eversible from the second member passageway, thereby providing a reduced-friction pathway for at least a portion of the second member, as the distal end of the second member is advanced into the internal bodily passage.